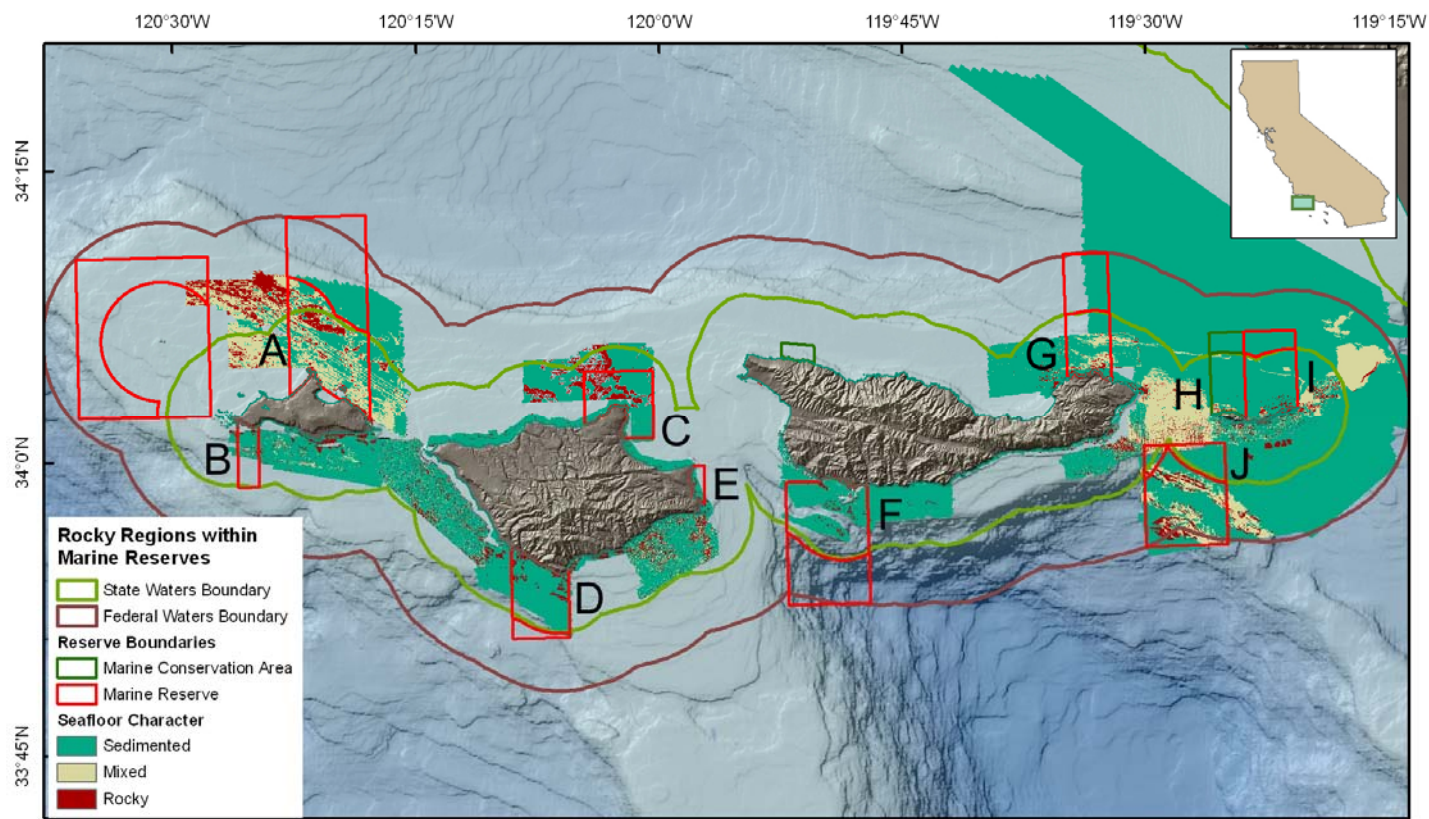


The Seafloor around the Channel Islands

Guy Cochrane, United States Geological Survey

The California Marine Life Protection Act (MLPA) mandates that marine protected areas (MPAs) encompass a range of seafloor habitats and depth zones. To achieve the goals of the Act, it is important that MPAs include substrate types that are representative of the surrounding area. In this study, we used swath sonar to map two key habitats, rocky reefs and soft bottom areas, which are representative of the Channel Islands region.



Approximately one third of the Channel Islands National Marine Sanctuary has been mapped by the USGS Coastal and Marine Geology Program and the Seafloor Mapping Lab at California State University, Monterey Bay (see map above). All MPAs that have been mapped contain rocky reefs and soft bottom areas. Most of the rocky reefs are located in shallow waters within the jurisdiction of the State of California (0-3 nautical miles offshore), with the exception of Footprint Marine Reserve, a deep water rocky ridge. Letters on the map above refer to the MPAs listed below

Percentages of rocky reef in State MPAs

	MPA Name	State MPA	Federal MPA	Local Area
A	Harris Point SMR	11%	0.3%	11.1%
B	Judith Rock SMR	10%	No Data	6.9%
C	Carrington Point SMR	20.8%	No Data	16.4%
D	South Point SMR	7.8%	0%	11.9%
E	Skunk Point SMR	10%	No Data	5.1%
F	Gull Island SMR	6.9%	0%	5%
G	Scorpion SMR	13.8%	0%	8.2%
H	Anacapa SMCA	1.6%	0%	3.2%
I	Anacapa SMR	2.7%	0%	3.2%
J	Footprint SMR	1.5%	12.6%	1.2%
	Santa Barbara Is. SMR	13.6%	No Data	4.4%

The California State Waters Mapping Program, a consortium of State, Federal, and Industry agencies, will map the remaining areas of all State waters within the next two years.

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SMR = State Marine Reserve; SMCA = State Marine Conservation Area